

## Calbindin Antibody | anti-CALB1 antibody

Calbindin, affinity purified, chicken

| CATALOG # | REACTIVITY                | APPLICATIONS                                                                |
|-----------|---------------------------|-----------------------------------------------------------------------------|
| AAA76567  | Bovine, Human, Mouse, Rat | Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry |

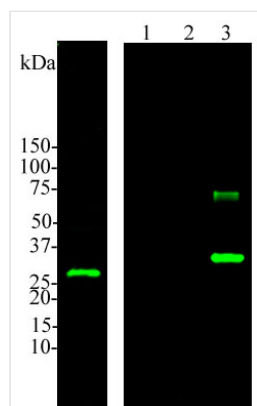
### PRODUCT SYNONYMS

Calbindin; affinity purified; chicken; anti-CALB1 antibody

### PRODUCT SPECIFICATIONS

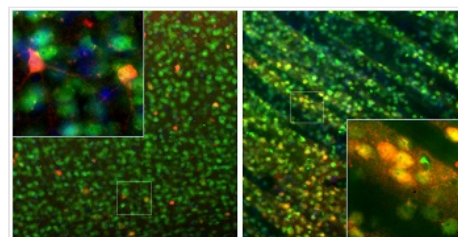
|                                                 |                                                                                                   |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Reactivity                                      | Bovine, Human, Mouse, Rat                                                                         |
| Purity/Purification                             | Affinity Purified                                                                                 |
| Form/Format                                     | Liquid                                                                                            |
| Sequence Length                                 | 261                                                                                               |
| Applicable Applications for anti-CALB1 antibody | WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry) |

### IMAGES



#### Application Data

Image: Western blot analysis of Calbindin. Blots of rat brain lysate (left), 0.5 ug of His-tagged recombinant proteins (right) were probed with Calbindin at 1:5,000. Lane1: Parvalbumin, Lane 2: Calretinin, Lane 3: Calbindin. In rat brain lysates, this antibody recognizes a clear band at 30 kDa which represents calbindin and it reacts only with calbindin protein, and not other calcium-binding proteins. The band at ~60 kDa is most likely the dimer of calbindin.



#### Application Data

Images: Adult rat brain cortex (Left) and striatum (Right) sections (45 μM; fixed by transcardial perfusion with 4% paraformaldehyde) were stained with our Calbindin (1:1,000, red), and our monoclonal mouse Fox3/NeuN. Calbindin labels a subset of sparsely-distributed interneurons (calbindin-positive interneurons) in the cortex (Left), and more densely-distributed neurons in the striatum (Right). Since neurons also express Fox3/NeuN, calbindin-positive cells appear to be gold to yellow. Insets are high magnification images of boxed area of each image. Blue is Dapi nucleus staining.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-CALB1 antibody | <p>Calbindin, also known as calbindin 1 or calbindin-D28k is a member of the large superfamily of cytoplasmic Ca2+ binding proteins. Calbindin-1 belongs to the subclass of these containing the "EF hand" Ca2+ binding motif originally characterized in parvalbumin. Calbindin is expressed in mammalian brain, intestine, kidney and pancreas. In the brain it is localized in certain classes of neurons, and antibodies to it are useful for identifying specific neuronal cell types. It is particularly concentrated in the dendrites and perikarya of cerebellar Purkinje cells, but is also found in many GABAergic interneurons in the cortex.</p> <p>The function of calbindin-1 appears to be primarily buffering the Ca2+ level in cells. The affinity of calbindin for Ca2+ is low at the typical resting cytoplasmic Ca2+ level of around 100 nM, and the protein only binds Ca2+ significantly when levels increase greatly. Accordingly, it is widely thought that the primary function of this protein is to act as a Ca2+ buffer. Buffering Ca2+ is important, as uncontrolled increases in the level of this cation can lead to both apoptosis due to Ca2+-stimulated release of proteins from mitochondria and necrosis due to the activation of Ca2+-dependent proteases.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                        |
|----------------------------------|------------------------|
| NCBI GI #                        | 4826655                |
| NCBI GeneID                      | 793                    |
| NCBI Accession #                 | NP_004920.1            |
| NCBI GenBank Nucleotide #        | NM_004929.3            |
| UniProt Accession #              | P05937; B2R696; B7Z9J4 |
| Molecular Weight                 | 23,609 Da              |
| NCBI Official Full Name          | calbindin              |
| NCBI Official Synonym Full Names | calbindin 1            |
| NCBI Official Symbol             | CALB1                  |
| NCBI Official Synonym Symbols    | CALB; D-28K            |
| NCBI Protein Information         | calbindin              |
| UniProt Protein Name             | Calbindin              |
| UniProt Gene Name                | CALB1                  |
| UniProt Synonym Gene Names       | CAB27                  |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/bovine-human-mouse-ovine-rat-antibody/calbindin/76567>